

PIPE MATERIAL REQUIREMENTS

Type	Size Limits	Design “n” Values	Other Requirements
Reinforced Concrete Pipe (R.C.P.)	15” to 84”	0.013	Use at least Class IV pipe meeting requirements of AASHTO M 170.
Horizontal Elliptical Reinforced Concrete Pipe (H.E.R.C.P.)	23”x 14” to 53”x 34”	0.013	Use at least Class IV pipe meeting requirements of AASHTO M 207.
Corrugated Steel Pipe, Aluminized Type 2 (C.S.P.)	15” to 60”	0.024	Use at least 14 gage pipe meeting requirements of AASHTO M 36 for Type I pipe. Use only helical corrugations. Aluminum-coated conforming to M 274
Corrugated Aluminum Pipe (CAP)	15" to 60"	0.024	M 196, Type I
Corrugated Steel Pipe – Arch, Aluminized Type 2 (C.S.P.A.)	17”x 13” to 71”x 47”	0.024	Use at least 14 gage pipe meeting requirements of AASHTO M 36 for Type II pipe. Use only helical corrugations. Aluminum-coated conforming to M 274
Corrugated Aluminum Pipe–Arch (CAPA)	17"x 13" to 71"x 47"	0.024	M 196, Type II
Corrugated Polyethylene Pipe (CPP-S)	15” to 48”	0.013	Use pipe meeting requirements of AASHTO M 294-90. Use only type S (smooth interior) pipe with soil-tight couplings. To be used outside the pavement template only, unless prior approval is obtained from Highway Hydraulics Division. Must use granular backfill around pipe.
Non-Asbestos Fiber-Cement Storm Drain Pipe (FCP)	12" to 48"	0.013	C 1450
Polyvinyl Chloride Profile Wall Pipe (PPWP)	18” to 48”	0.013	M 304 To be used outside the pavement template only, unless prior approval is obtained from Highway Hydraulics Division. Must use granular backfill around pipe.
Steel Spiral Rib Pipe, Aluminized Type 2 (SRP)	18” to 60”	0.013	Use at least 14 gage pipe meeting The requirements of AASHTO M 36 for Type IR pipe. Aluminum-coated conforming to M 274
Steel Spiral Rib Pipe Arch, Aluminized Type 2 (SRPA)	17"x 13" to 71"x 47"	0.013	M 36, Type IIR, 14 ga minimum, Aluminum-coated conforming to M 274
Aluminum Spiral Rib Pipe (ASRP)	18” to 60”	0.013	M 196, Type IR
Aluminum Spiral Rib Pipe Arch (ASRPA)	17"x 13" to 71"x 47"	0.013	M 196, Type IIR
Structural Steel Plate Pipe (SPP)	60" to 96"	0.021	M 167
Structural Steel Plate Pipe Arch (SPPA)	60" to 96" diameter equivalent	0.021	M 167

Height of Cover Limits:

Use applicable charts in the Highway Drainage Manual to determine height of cover limits. For spiral rib pipe, use same height of cover limits as for comparably sized corrugated metal pipe with 2 2/3"x 1/2" -corrugations. For polyethylene pipe, consult manufacturers literature -however minimum cover shall be 2 feet.